

LABORATORY REPORTS

Header on all pages: Put last name / page # on the upper right corner of each lab report page.

On MS Word: use View – Header and Footer, type in last name / page and then click on the icon for page number (#). It will automatically number your pages for you! Other word processors use a similar function. This is a useful function for writing term papers!

Lab Title: _____

Date of Lab: _____ (date of lab work)

Name: _____ (your name)

Subject / Period/ Teacher: _____

Lab Partners: _____
List full name for each lab partner, not just first names!

Date submitted: _____

Purpose: A brief statement of what is to be done / learned in the lab.
“The purpose of the lab is to.....”

Materials: *List* the lab equipment and materials used.

Procedure: A brief **OUTLINE** of the procedure. You do not have to re-copy the entire procedure, but rather, you can simplify it.
Outline the procedure as follows:
1. Write out step #1....
2. Write out step #2.... and so on.

****Also include a diagram of the experimental set-up / equipment.**

Data: A **data table / chart** that includes every observation / measurement that is made in the lab. Neatness counts! Use “Table” function on computer.

Calculations: Show the formulas used, and the calculations, with units. If there is a series of calculations (Ex: 20 of the same calculation), you may show 2 representative calculations and state that the others were performed in the same manner. Watch units and sig figs.

Graphs: If appropriate, include graphs. Use rules of graphing, draw a best-fit line or curve.

Questions: Answer assigned questions, **using complete sentences.**

Errors: If there were errors, explain and/or calculate them.

Note: “*human*” or “*calculation*” errors are not acceptable.

Use of either of these terms = automatic rewrite.

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$$\% \text{ Error} = \frac{|(\text{Experimental value} - \text{Accepted value})| \times 100}{(\text{Accepted value})}$$

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$$\text{Deviation} = |(\text{Experimental value} - \text{Average value})|$$

$$\% \text{ Deviation} = \frac{|(\text{Experimental value} - \text{Average value})| \times 100}{(\text{Average value})}$$

Deviation is used when there is no true / accepted value, but rather, an average value.

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**Conclusion:** Explain what was done/accomplished in the lab. Do NOT recite the procedure again, though the procedure may be briefly summarized. *Describe and explain what the results (data, graphs, observations) showed---*was there a pattern, relationship?

**Spend A LOT of time on this part of the lab...it is not easy!**

**\*\*In writing lab reports, avoid the use of “I”, “us”, “we”, “you”, and similar pronouns. Instead of writing, “In this lab, I found that...”, rephrase it as, “In this lab, it was observed that...”, etc.**

## **COMMENTS:**

- *Lab should be typed. If you do not have computer access, see me immediately.*
- *Start Early--- not just the night before the report is due.*
- Check spelling and grammar—it counts!
- Have lab report ready to hand in at the start of the period. Do NOT assemble it in class.